

# **EXHIBIT 1**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

KROY IP HOLDINGS, LLC,

Plaintiff,

V.

SAFEWAY, INC.,

Defendant.

Civil Action No. 2:12-cv-800-WCB  
(LEAD CASE)

The Honorable William C. Bryson

KROY IP HOLDINGS, LLC,

Plaintiff,

V.

THE KROGER CO.,

Defendant.



Civil Action No. 2:13-cv-141-WCB

The Honorable William C. Bryson

**DECLARATION OF ROBERT SHERWOOD IN SUPPORT OF PLAINTIFF KROY'S  
OPPOSITION TO DEFENDANTS' MOTION FOR SUMMARY JUDGMENT  
OF INVALIDITY UNDER 35 U.S.C. SECTION §101**

I, Robert Sherwood, do hereby declare as follows:

1. I have 40 years of professional expertise and knowledge in the relevant subject matters of this lawsuit. I have worked in the computer industry since 1970. I have spent the majority of my career designing, developing and implementing customized computer systems and software in a variety of fields. I have designed, assembled and sold more than 200 customized computer systems to defense contractors, law firms, and other commercial businesses. I am familiar with many companies' efforts to introduce new computer systems to achieve business objectives. I have experience in Internet based networking, including systems to enable retailers and other business to targeted advertising and other content to users based on consumer demographic and other personal profile data. My employment and consulting career has run the spectrum from high level executive management (e.g. Director of Marketing) to very detailed hands-on IT functions. My CV, which provides further details regarding my background and qualifications, is attached as Exhibit 1.

2. I have been retained by Plaintiff, Kroy IP Holdings, LLC to provide an expert report and testimony regarding U.S. Patent No. 7,054,830 and in support of Kroy's assertions of infringement by Defendants Kroger and Safeway. I have also issued an expert report on the validity of the Kroy patent claims, including an analysis of Defendants' alleged prior art.

3. I have been asked to consider Claim 1 of the '830 patent, which reads:

A system for incentive program participation and automated award fulfillment, comprising:

a host computer coupled to a network;

a first database accessible from said host computer; and

an automated award fulfillment application program executed on said host computer for participation in incentive programs of a plurality of providers in communication with an inventory management system associated with each of said plurality of providers wherein said automated award fulfillment application program provides sponsor-selected

fulfillment,

said automated award fulfillment application program comprising:

code adapted to provide a sponsor-selected specific award unit item, said sponsor-selected specific award unit item being tailored to demographic and psychographic preferences of a sponsor-selected consumer user, and

code adapted to provide a sponsor-selected geographic location for fulfillment.

4. I have also been asked to consider Claim 19 of the '830 patent, which reads:

19. A method for providing an incentive programs and automating award fulfillment, comprising:

providing a host computer;

providing an incentive program on the host computer, wherein a participant may participate in said incentive program;

providing a database of awards on the host computer associated with the incentive program; and

providing automated award fulfillment of said awards to participants, including providing communication with an inventory management system associated with each of a plurality of providers wherein said automated award fulfillment comprises

providing sponsor-selected fulfillment comprising

providing a sponsor-selected specific award unit item,

providing said sponsor-selected specific award unit item tailored according to demographic and psychographic preferences of a sponsor-selected consumer user, and

providing a sponsor-selected geographic location for fulfillment.

5. I have also been asked to consider dependent claims 20-25 of the '830 patent.

6. I have reviewed the Court's claim construction orders dated June 4, 2014 and July 28, 2014. My opinions are based on applying the Court's claim construction to the asserted claims.

7. I have read Defendants' Motion for Summary Judgment of Invalidity under 35 U.S.C. Section 101. I now submit this declaration in support of Kroy's Opposition to the motion.

### **I. Technology Background**

8. The invention of the '830 patent relates to the field of promotional incentives, such as coupons and preferred pricing. At the time of the invention (1996-1997), retailers had used coupons for many years in efforts to gain new customers, introduce new products, improve weak selling products, help reduce excess inventory or win back consumers' brand loyalty. Coupons had traditionally been delivered to consumers through media such as newspaper inserts, in-store shelf coupon dispensers, check-out coupons (generally issued based on the customer's current purchase), in-product coupons, and direct mail. In addition to manufacturers' coupons, large retail chains issued store coupons on a regular basis.

9. Although the incentives industry has traditionally spent a great deal of resources in market research, printing, issuing, distributing and redeeming coupons, redemption rates were low. Factors contributing to this include consumers not needing or wanting the product advertised, consumers not bothering to clip and sort coupons, losing clipped coupons or leaving them behind on shopping trips, inadequate distribution methods, saturation of coupons within specific areas, and unavailability of new products when the coupon is issued.

10. The '830 patent discusses drawbacks associated with prior approaches for conducting incentive programs available at the time of the invention. One form of incentive program involved mailing promotional checks or discount coupons to the customer as a reward for making an initial purchase. This was a very labor intensive approach involving manual collection of initial proof of purchase, preparation of checks, etc. ('830 patent at 2:13-23.) Traditional non-personalized coupon distribution and redemption approaches rely on consumers to clip and save coupons of interest and bring them to the store. Because few consumers will go

through all the steps necessary to redeem their coupons, these programs are of limited effectiveness in achieving the manufacturer's objective to induce sales of its product. (*Id.* at 2:36-49.) Verification of redemption conditions also presents a challenge at check-out when fulfillment is not automated, especially when a consumer presents many coupons. (*Id.* at 2:50-54.)

11. The '830 patent explains that the costs to sponsoring companies of generating and administering traditional incentive programs may exceed their benefits. (*Id.* at 1:65-2:4.) These costs may be particularly high in instances where the activities associated with an incentive program involve a number of companies, or different organizations within the same company. (*Id.* at 2:4-7.)

12. The '830 patent explains that known computerized incentive programs addressed only some of the drawbacks of traditional promotions. (*Id.* at 2:64-3:1.) For example, U.S. Patent No. 5,053,955 to Peach *et al.* discloses an improved process of printing and assembling coupons, reducing some of the associated paperwork. ('830 Patent at 3:1-10.) Other computer-based systems were available to track certain aspects of consumer participation in incentive programs. For example, U.S. Patent No. 5,056,019 to Schultz *et al.* discloses a method for providing manufacturer purchase reward offers by tracking consumers' purchase histories and using a data processing system to determine if the required purchases have been made to earn a reward. However, the system of Schultz does not address the need for a system that assists sponsor companies in generating incentive programs, in tracking participation of consumers in multiple incentive programs, or in fulfilling awards. (*Id.* at 3:22-43.) Known computerized incentive programs also generally did not offer sponsors the ability to automate fulfillment of awards. The

fulfillment was often logistically difficult and expensive, requiring coordination of prize inventory, systems and information. (*Id.* at 4:20-32.)

13. With respect to coupons and price discounts provided by traditional retailers, fulfillment often takes place during checkout. Typical retail checkout lanes include a POS terminal, which is an arrangement consisting of a store register, and any peripherals that may be attached to it such as an electronic card reader, cash box, consumer-facing PIN pad, barcode scanner and printer. POS terminals are typically supported by a POS server to perform the basic functions of scanning products UPC codes, retrieving and displaying pricing and item description information, and accepting forms of electronic payment. POS servers may be located at a store location and/or at a remote central data center. POS servers may also provide data to other systems such as inventory, accounting, purchasing, receiving, shipping, payroll, management reporting, etc.

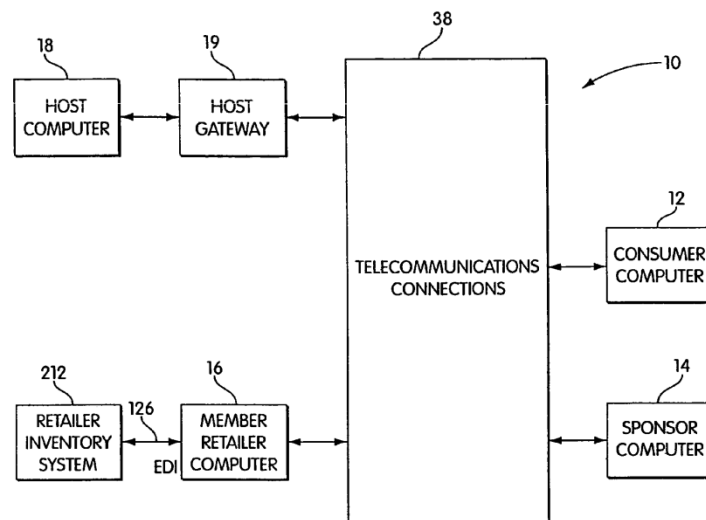
14. Kroy made the inventions claimed in the '830 patent to remedy the limitations of, and problems with, prior art approaches. Before the inventions of the '830 patent, there was a need for a system that would allow retailers a specific implementation of an incentive program in manner that is fully functionally integrated with their existing POS and back office systems, so as to reduce cost while giving retailers more flexibility, capabilities and effectiveness in incentivizing desired consumer behavior.

## **II. The Inventions Disclosed in the '830 Patent**

15. The invention disclosed and claimed is not directed to individual computer components in isolation, but to a novel, specialized system and methods for operating sponsor controlled personalized incentive programs that automate the targeting and fulfillment of awards based on both individualized consumer demand and provider inventory data.

16. The '830 patent discloses and claims a computer-based system that permits sponsors to conveniently create and administer incentive programs targeted to consumers. The consumers may participate using a conventional computer to obtain awards such as merchandise discounts, coupons, prizes, services and other incentives, and may redeem these awards in the manner specified by the sponsor. The system enables sponsoring companies to offer such incentive programs involving multiple award providers, to target specific awards to consumers on a personalized basis, to control the manner and geographic locations at which awards may be redeemed, and to automate award redemption and track participation. The system can also communicate with inventory management systems associated with award providers, which enhances its overall flexibility, capabilities and effectiveness.

17. The following Fig. 2 of the '830 patent provides a high-level overview of a system architecture for practicing the disclosed invention.



**Fig. 2**

18. The system includes a “host” system (18), which runs an incentive builder application program and is connected to one or more networks (38), such as the Internet. (‘830 Patent at 10:39-50.) A “sponsor,” which includes any individual or company that wishes to offer



an incentive program / promotion, may access the host system using a standard computer (14). (*Id.* at 7:51-53.) The sponsor may conduct a variety of activities, such as obtaining pre-packaged incentive programs and building new incentive programs by entering the parameters of and associating awards with the sponsor's incentive programs. (*Id.* at 6:13-19, 14:3-10, 14:23-46, 14:63-15:5.) A software application prompts the sponsor for the parameters needed to build a new promotion or incentive program, such as type of promotion, duration of the promotion, target participants, specific identification of associated awards, conditions to obtain awards, etc. (*Id.* at Figs. 11-12, 30:47-53, 31:55-32-20, 35:3-22.) The system then creates the underlying software code and/or data to implement the sponsor-designed incentive program, creates HTML pages with appropriate graphics, text and fields for the end customer, and stores records and other information in appropriate databases. (*Id.* at 32:21-24, 33:12-52.)

19. Consumers who wish to participate in incentive programs offered by sponsors may do so using a standard computer to interact with a consumer section of web site hosted on a server of a host system. The consumer may register to become a member of one or more incentive programs. ('830 Patent at 12:18-33.)

20. A consumer database contains records for each participating consumer, such as name, address, email address, as well as information regarding the consumer's historical participation in incentive programs. (*Id.* at 13:3-18.) Other records containing psychographic or demographic data associated with the consumer may also be created. This customer profile information may be obtained from sources such as responses to inquiries answered by the consumer and information about the consumer's participation in the sponsor's incentive program. (*Id.* at 13:18-25.) The incentive programs could include a variety of games, or, alternatively, may include entering data, completing surveys, clicking on one or more icons in a

pre-determined manner, or other “win eligible” activities, such as answering questions or participating in a customer loyalty program. (*Id.* at 13:40-48, 30:57-31:3.) The consumer site also provides rules and directions for participating in incentive programs and information tracking the consumer’s activities and incentive program awards. (*Id.* at 12:54-13:2.)

21. The disclosed invention permits the sponsor to target incentive programs and awards to categories of consumers based on consumer demographic (age, residence location, sex, etc.) and psychographic (opinions, interests, etc.) information. As mentioned, this information may be obtained during consumer registration, from tracking consumer participation in incentive programs and/or from consumer responses to specific inquiries, and is accessible by sponsors. (‘830 Patent at Figs. 16, 17 and 13:3-25, 15:16-23, 18:43-54, 31:37-40, 41:62-67.) The sponsor may also provide parameters that control award fulfillment and redemption, such as fulfillment by the sponsor via mail, fulfillment at a retail location or by a third-party program participant. The sponsor-specified fulfillment details are stored in a database. (*Id.* at 6:13-19, 20: 13-16, 21:58-63, 41:11-20, 46:42-56.) The fulfillment details may include sponsor-specified geographic locations at which a particular award is available, such as for example, in the region identified by a particular ZIP code. (*Id.*; *see also* 39:41-54.) In this manner, sponsors may target awards demographically and by geography to increase traffic to desired retail outlets. (*Id.* at 42:39-49.)

22. The disclosed system integrates the incentive program host system with one or more retail inventory management system to access retail inventory information, such as SKU, type of inventory and the like. (‘830 Patent at 15:41-47; 20:58-66.) This facilitates planning and executing incentive program strategies based on business insights available from other retail systems, and, in particular, inventory management systems for tracking product availability, inventory levels, sales patterns, etc. The ‘830 patent explains that the retail inventory

management systems are typically also connected to the POS system, can be queried by several client systems, and may be updated based on purchases for inventory replenishment. (*Id.* at 39:58-67.) Thus, the host system may query inventory management systems to determine merchandise available for incentive programs, locations of merchandise or other inventory information. In this manner, the award database may be kept in synch with current retailer inventory information. (*Id.* at 39:18-27.) The award database may keep track of items associated with awards using identifying data from the inventory management system, so that each award can be tied to the exact item, or type of items in the inventory of the retailer. (*Id.* at 41:11-16; 46:25-30.) The disclosed system also includes computerized tools for retailers to associate promotions with retail items in their inventory. (*Id.* at 11:33-52, 15:31-47.)

23. As the patent teaches, larger retailers would typically use enterprise-wide inventory systems that allow for basic tracking of products SKUs and availability, and which may also include product replenishment or ordering components. (*Id.* at 40:4-27.)

24. As the above discussion is intended to illustrate, the invention provides a fully integrated system for creating, distributing and automating the fulfillment of awards in personalized consumer incentive programs. The systems permits sponsors to create and target specific awards to specific consumers geographically and based on consumer demographics and psychographics, and allows the sponsor to control award fulfillment conditions in an automated fashion that reduces costs and increases convenience to the consumer. A host system coordinates the selection and targeting of awards in a manner synchronized with retail inventory information about available awards and products associated with awards. By providing a system that integrates incentive program creation and execution with other retail systems in this manner, the invention provides great flexibility to program sponsors and improves the effectiveness of their

promotions while reducing cost. Sponsors can quickly design and roll out promotions directly responsive to business conditions, while consumers receive promotions that are more relevant to their needs and interests. None of the prior approaches offered the unique combination of features and benefits recited in the patent claims.

25. I have read the statements in Defendant's Motion for Summary Judgment to the effect that the system and methods claimed in Kroy invention use only "conventional" computers, the Internet, and nothing more than generic off-the-shelf computer hardware and software. I disagree. As is discussed in detail above, Kroy's claims recite a system and methods that require specialized software and hardware working together in a customized retail business systems environment. In the Kroy systems and methods, the computers coordinate and systematize the workings of multiple specialized computers, notably including an inventory management system.

26. I also disagree that the "automated award fulfillment application" recited in the claim is "generic" or "off-the-shelf" software. The Kroy patent claims recite that this application must provide for automated fulfillment of awards, provide sponsor-selected fulfillment, communicate with an inventory management system, and include "code adapted to provide a sponsor-selected specific award unit item, said sponsor-selected specific award unit item being tailored to demographic and psychographic preferences of a sponsor-selected consumer user," as well as "code adapted to provide a sponsor-selected geographic location for fulfillment." For a sponsor to obtain software that meets these requirements, specialized programming would be required. I am not aware of any generic off-the-shelf software that meets the description in the patent claims. A person of ordinary skill in the art would understand that a conventional computer cannot perform the Kroy invention.

### **III. Benefits of Kroy's Invention**

27. In addition to Kroy's invention, there are many other different methods and systems of administering incentive plans. The specific invention of the '830 patent provides an incentive program and award fulfillment system offers many benefits to incentive program sponsors and other program participants. The '830 patent permits sponsors to build incentive programs easily and efficiently, and provides for convenient tracking of participation, and convenient, automated award fulfillment. It allows sponsoring companies to offer incentive programs involving multiple award providers, to target specific awards to consumers on a personalized basis, to control the manner and geographic locations at which awards may be redeemed, and to automate and manage the entire process from award creation to redemption. The Kroy system also communicates with inventory management systems associated with award providers.

28. In addition to reading Defendants' motion for summary judgment, I have also analyzed the prior art presented by Defendants in this case. There is no evidence that the system and methods in the Kroy invention were well-understood, routine, conventional activity previously engaged in by artisans or even researchers in the field.

29. Alternative approaches to system design present many difficulties, drawbacks, and additional costs. The invention permits the sponsor to set up award units defining award parameters and fulfillment conditions, to select geographic and personal award targeting parameters, to do so in coordination with business intelligence available from inventory management systems, and to automate award fulfillment in compliance with the sponsor selected targeting and parameters. Other prior art systems did not provide this combination of features.

30. Instead, Kroy's patent claims recite systems and methods to achieve results that were not available before the Kroy invention. An incentive program host integrated with retail inventory management systems allows the sponsor to align incentive promotions with specific marketing strategies and to design specific promotions for the right products targeted to the right consumers in the right locations, and to do this in an efficient and cost effective manner. Inventory information can include product description, product location, inventory cost, consumer purchases, sales patterns and logistical data. Inventory management data can be quite complicated. For example, products can be seasonal in some locations and can also be perishable. Product cost and retail pricing varies by geographic location. Some products come in numerous varieties and are related to other products. Products sell differently in different local markets and throughout the year. The inventory management systems must manage relationships with the many product vendors in its supply chain. The inventory management systems manage these and other logistical complications.

31. Integrating the incentive program host system with an inventory management systems has significant benefits. For example, the incentive program sponsor can confirm whether and where a product is being sold before it creates a promotion for it. The sponsor can take into account for example sales trends, current inventory levels, product cost and competitive pricing conditions. It facilitates providing incentives that take into account the relationships among products. When merchandise items are perishable, or seasonal, knowing when the inventory is available, and where it is available, is very important. Providing reasonably up-to-date data on item movement allows the sponsor to design incentives based on current sales trends relative to current inventory conditions. Integration with an inventory management system makes Kroy's specific system for implementing an incentive program less costly, a more

effective marketing tool, more logistically manageable and more aligned in real time with changing business circumstances.

32. I have read Defendants' statements in their motion for summary judgment arguing that the Kroy invention could be performed by humans. In combination with the fact that the '830 patent claims recite including a plurality of providers in the incentive program, the coordination of the incentive program with up-to-date information about current inventory conditions would not be possible to achieve through manual processes or using a pencil and paper, or through any other system and method available before the Kroy invention.

33. Another reason why the system of the '830 patent is advantageous is that it facilitates having multiple award providers participating in the promotions. Using the Kroy system, incentive program sponsors can coordinate with numerous providers including manufacturers and third parties. The scale and scope of the inactive program can be increased by including multiple providers. The ability to plan and execute incentive program strategies involving numerous stores and manufacturers is extremely valuable.

34. The Kroy invention also allows the sponsor to select the geographic locations for award fulfillment. By limiting the redemption of promotions to selected locations, the sponsor can drive consumers to stores in the regions selected to support marketing strategies in those regions. Together with the ability to communicate with an inventory management system, an incentive program sponsor can ensure that it provides consumers with coupons for products that are available in the store locations where they most frequently shop.

35. The Kroy invention also allows the sponsor awards units that are tailored to the customers' psychographic and demographic preferences. This can be very important to an incentive program's effectiveness. The personalized coupons drive interaction with consumers.

Consumers respond at higher rates to personalized coupons. Personalized coupons increase consumers' trips to stores, spending, and loyalty. This is another important benefit of the Kroy patented system and methods.

I declare under penalty of perjury pursuant to 28 U.S.C. Section 1746, that the foregoing statements of fact are true to the best of my personal knowledge information and belief, and that matters of opinion set forth herein constitute my true opinions.

Date: August 11, 2014

*Robert J. Sherwood*

Robert J. Sherwood